Internet Appendix for "Information Barriers in Global Markets: Evidence from International Subcontracting Relationships"

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In this Internet Appendix, we provide additional robustness tests for the analysis in the main article.

- Figure IA.1 reports scatterplots of differences in return improvements around IFRS enforcement reforms that complement the estimates presented in Table 9.

- Table IA.1 repeats the estimates of the main article but computes inference from bootstrapped standard errors.

- Table IA.2 presents the main results from Tables 3 and 4 of the main article, dropping selected investment styles from the estimation sample.

- Table IA.3 presents robustness tests on Table 3 of the main article, alternating the use of the different instruments used in the first-stage selection equation.

- Table IA.4 presents robustness tests on Table 4 of the main article (i.e., the total realized gains from outsourcing), alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

- Table IA.5 presents robustness tests on Table 5 of the main article (i.e., the structural form estimates of the selection equation), including descriptive statistics of the variable "Expected Return Improvements" and robustness tests alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

- Table IA.6 presents robustness tests on Table 6 of the main article (i.e., the switches in the outsourcing status in structural form), alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

- Table IA.7 presents robustness tests on Table 7 of the main article (i.e., the flow implications of performance improvements), alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

- Table IA.8 presents robustness tests on Table 8 of the main article (i.e., the link between performance improvements and market segmentation), alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

- Table IA.9 presents robustness tests on Table 9 of the main article (i.e., the difference-in-difference estimates on IFRS enforcement reforms), alternating the use of the different instruments used in the first-stage selection equation (as in Table IA.3).

FIGURE IA.1

Scatterplots of Differences in Return Improvements around IFRS Enforcement Reforms

Figure IA.1 complements Table 9 of the main article and presents scatterplots of the differences in return improvements from outsourcing that are realized in countries that undergo an IFRS enforcement reform relative to return improvements in countries that do not implement such reforms. All specifications are as in Table 9 of the main article. On the left in each panel (labelled "Treatment"), every dot indicates the estimated change in average return improvements that is realized 3 to 15 months after the country experiences an IFRS enforcement reform minus the same average return improvements that is realized in the country 15 to 3 months prior to the reform. On the right in each panel (labelled "Control"), every dot indicates the same estimated change in average return improvements in all remaining countries that do not experience an IFRS enforcement reform. The dotted lines in each panel indicate the average changes per group (as reported in Table 9).
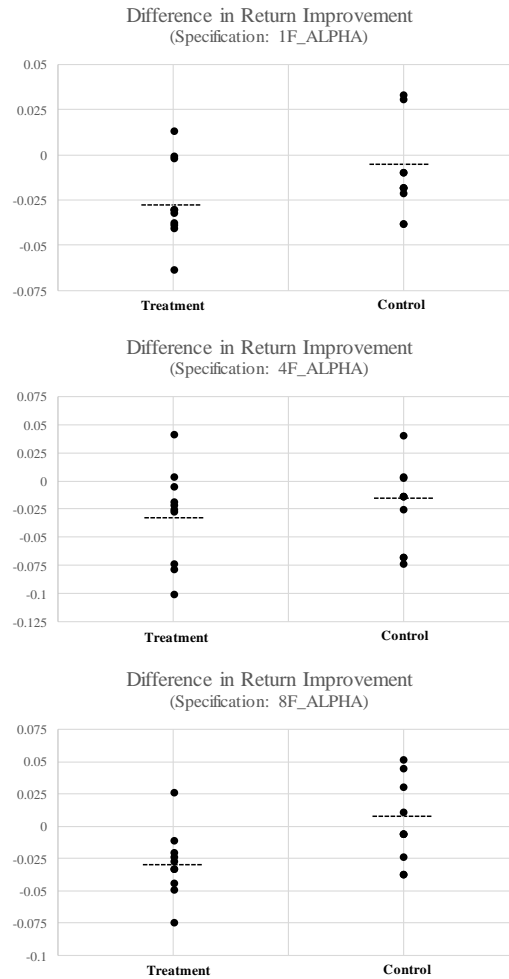

Difference in Return Improvement
(Specification: 1F_ALPHA)

Difference in Return Improvement
(Specification: 4F_ALPHA)

Difference in Return Improvement
(Specification: 8F_ALPHA)

Bootstrapped Standard Errors

Table IA.1 presents robustness tests of results of the main article. Specifically, we present the same specifications as in the main article but compute inference from bootstrapped standard errors in order to address a potential error-in-variable problem in our 2-step estimation procedure: many estimates in the main article include estimated regressors (e.g., the selectivity variables in Table 3 or the various estimated performance improvements in Tables 5 to 9) which can impact inference. We allow for the same clustering structure as in the main article. All other specifications are unchanged.

Panel A. Table 3 with bootstrapped standard errors (column 1 is unchanged as it does not contain estimated regressors)

Equation	Selection	Performance		Performance		Performance	
Sample	All funds	Out-sourced	In-house	Out-sourced	In-house	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	OUTSOURCED	1F_ALPHA		4F_ALPHA		8F_ALPHA	
Determinants of Outsourcing ($\mathbf{Z_{j,t}}$)							
SOLD_TO_INTERNATIONAL	-0.0050***						
	(-3.99)						
SOLD_TO_US	0.0000						
	(0.02)						
FAMILY_FUNDS_ AT_INC.	0.0291						
	(1.59)						
ENGLISH_LANGUAGE	0.1195***						
	(4.18)						
Determinants of Performance ($\mathbf{X_{j,t}}$)							
MANAGER_STYLE_SIZE	0.0166***	0.0098*	-0.0017	0.0082	0.0017	0.0169***	0.0025
	(4.54)	(1.69)	(-0.77)	(1.62)	(0.75)	(3.04)	(1.18)
COMMON_LANGUAGE	0.0226	0.4721***	0.0560	0.2778**	-0.0701*	0.4684***	0.0189
	(0.45)	(3.55)	(1.35)	(2.15)	(-1.76)	(3.57)	(0.50)
KM_DISTANCE	-0.0025	0.0216**	0.0030	0.0044	-0.0070*	0.0030	-0.0029
	(-0.48)	(1.99)	(0.73)	(0.40)	(-1.67)	(0.25)	(-0.68)
FAMILY_STYLE_ SPECIALIZATION	-0.0019***	-0.0011*	0.0011***	0.0001	0.0014***	-0.0015**	0.0006**
	(-4.59)	(-1.69)	(3.13)	(0.10)	(4.03)	(-2.38)	(2.09)
FAMILY_SIZE	-0.0198***	0.0069	0.0134***	0.0091	0.0167***	-0.0025	0.0113**
	(-3.22)	(1.08)	(2.60)	(1.31)	(3.57)	(-0.37)	(2.48)
FUND_DEPENDENCE	0.2371***	0.1398**		0.0466		0.1673**	
	(6.87)	(2.04)		(0.76)		(2.40)	
FAMILY_MANAGER_ SAME_LANGUAGE	-0.1956***	-0.0307		-0.0140		-0.0953*	
	(-2.65)	(-0.57)		(-0.26)		(-1.78)	
FUND_SIZE	-0.0084	-0.0284***	-0.0151***	-0.0332***	-0.0239***	-0.0371***	-0.0257***
	(-1.42)	(-3.35)	(-3.44)	(-3.78)	(-5.80)	(-4.15)	(-6.54)
AGE	-0.0032***	0.0016	0.0019***	0.0023*	0.0010*	-0.0001	0.0013**
	(-4.05)	(1.15)	(3.69)	(1.71)	(1.94)	(-0.09)	(2.06)
EXPENSES	0.0279*	0.0459*	0.0197	-0.0062	-0.0021	0.0164	-0.0028
	(1.96)	(1.75)	(1.41)	(-0.22)	(-0.16)	(0.52)	(-0.23)
TURNOVER	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.63)	(0.88)	(0.06)	(0.57)	(0.03)	(0.42)	(0.02)
VOLATILITY	-0.0004	-0.0106***	-0.0067***	-0.0126***	-0.0079***	0.0030	0.0012
	(-0.37)	(-3.50)	(-3.64)	(-4.29)	(-4.31)	(1.00)	(0.70)
PASTRETURN	-0.0001	0.0041***	0.0054***	-0.0039***	-0.0026***	-0.0109***	-0.0098***
	(-0.49)	(3.30)	(7.45)	(-3.03)	(-3.45)	(-7.88)	(-14.22)
SHARECLASSES	-0.0019	-0.0107**	0.0026	-0.0027	0.0041	-0.0029	0.0028
	(-0.33)	(-2.30)	(0.76)	(-0.68)	(1.34)	(-0.66)	(0.90)
Selectivity Variables ($\mathbf{\lambda_{j,t}}$)							
INV_MILLS_RATIO		-0.2182**	0.0360	-0.1108	0.0871*	-0.3038***	0.0587
		(-2.49)	(0.61)	(-1.45)	(1.69)	(-3.73)	(1.08)
Fixed Effects				Time & Style			
Observations	453,757	93,547	360,210	93,547	360,210	93,547	360,210
Adj. (Col1: Pseudo) R^2	0.11	0.07	0.06	0.04	0.03	0.04	0.03

Panel B. Table 5 with bootstrapped standard errors

Specification	Performance with 1F_ALPHA (1)	Performance with 4F_ALPHA (2)	Performance with 8F_ALPHA (3)
Variables		OUTSOURCED	
EXPECTED_RETURN_ IMPROVEMENT	0.0857***	0.0271**	0.1200***
	(4.13)	(2.07)	(7.16)
SOLD_TO_ INTERNATIONAL	-0.0064***	-0.0065***	-0.0063***
	(-3.86)	(-3.88)	(-3.82)
SOLD_TO_US	-0.0002	-0.0002	-0.0002
	(-0.51)	(-0.56)	(-0.49)
FAMILY_FUNDS_AT_ INCEPTION	0.0149	0.0160	0.0151
	(0.76)	(0.81)	(0.77)
ENGLISH_LANGUAGE	0.1365***	0.1455***	0.1306***
	(4.73)	(5.05)	(4.50)
Observations	453,757	453,757	453,757
Pseudo R^2	0.05	0.04	0.05

Panel C. Table 6 with bootstrapped standard errors

Specification	Performance with 1F_ALPHA (1)	(2)	Performance with 4F_ALPHA (3)	(4)	Performance with 8F_ALPHA (5)	(6)
Variables			SWITCH_TO_IN_HOUSE			
LAG_EXP_RETURN_ IMPROVEMENT	-0.7301***	-0.4204***	-0.4632**	-0.1909	-0.7652***	-0.4649***
	(-5.34)	(-2.79)	(-2.56)	(-1.10)	(-6.41)	(-3.52)
LAG_SOLD_TO_INTERNATIONAL		0.0011		0.0011		0.0011
		(0.47)		(0.46)		(0.46)
LAG_SOLD_TO_US		-0.0007**		-0.0006*		-0.0007**
		(-2.20)		(-1.76)		(-2.24)
LAG_FAMILY_FUNDS_AT_ INCEPTION		-0.1281***		-0.1306***		-0.1299***
		(-6.79)		(-6.89)		(-6.89)
LAG_ENGLISH_LANGUAGE		-0.2597***		-0.3390***		-0.2404***
		(-3.78)		(-5.36)		(-3.58)
Observations	976	976	976	976	976	976
Pseudo R^2	0.04	0.12	0.01	0.11	0.04	0.12

Panel D. Table 7, Panel A with bootstrapped standard errors

Specification	Performance with 1F_ALPHA		Performance with 4F_ALPHA		Performance with 8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			FLOW			
LAG_EXP_RETURN_IMPROVEMENT	1.4021**	1.0213**	1.8958**	1.4432*	0.7284	0.5498
	(2.51)	(1.97)	(2.24)	(1.85)	(1.43)	(1.23)
LAG_ALPHA		0.2133***		0.2134***		0.2135***
		(13.03)		(13.02)		(12.98)
LAG_FLOW		0.0616***		0.0420***		0.0330***
		(5.40)		(3.56)		(2.79)
FUND_SIZE	-0.0177	-0.0104	-0.0126	-0.0062	-0.0229	-0.0144
	(-0.48)	(-0.37)	(-0.34)	(-0.22)	(-0.62)	(-0.51)
AGE	-0.0288***	-0.0223***	-0.0316***	-0.0243***	-0.0283***	-0.0217***
	(-4.55)	(-4.86)	(-4.92)	(-4.97)	(-4.40)	(-4.70)
EXPENSES	-0.3756***	-0.3092***	-0.3267***	-0.2723***	-0.3429***	-0.2852***
	(-3.30)	(-3.70)	(-2.92)	(-3.25)	(-3.09)	(-3.47)
TURNOVER	0.0003**	0.0002**	0.0003**	0.0002**	0.0003**	0.0002**
	(2.09)	(2.22)	(2.21)	(2.38)	(2.31)	(2.53)
VOLATILITY	-0.0453***	-0.0353***	-0.0422***	-0.0329***	-0.0518***	-0.0409***
	(-3.57)	(-3.57)	(-3.24)	(-3.26)	(-3.97)	(-3.83)
PASTRETURN	0.0654***	0.0477***	0.0660***	0.0498***	0.0647***	0.0493***
	(16.05)	(13.77)	(16.10)	(13.99)	(15.99)	(14.20)
SHARECLASSES	0.0726**	0.0538*	0.0663**	0.0494	0.0604**	0.0449
	(2.41)	(1.71)	(2.27)	(1.59)	(2.11)	(1.46)
Fixed Effects			Time & Style			
Observations	69,657	68,693	69,657	68,693	69,657	68,693
Adj. R^2	0.04	0.08	0.04	0.08	0.04	0.08

Panel E. Table 7, Panel B with bootstrapped standard errors

Specification	Performance with 1F_ALPHA		Performance with 4F_ALPHA		Performance with 8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			FAMILYFLOW			
LAG_AVG_RETURN_IMPROVEMENT	1.5184**	1.5632***	1.6482**	1.7143**	1.0421*	1.0801*
	(2.37)	(2.62)	(2.12)	(2.29)	(1.73)	(1.93)
LAG_FAMILY_ALPHA		0.0569		0.0650		0.0497
		(1.61)		(1.56)		(1.30)
LAG_FAMILYFLOW		0.0366		0.0367		0.0368
		(1.50)		(1.50)		(1.50)
FAMILY_SIZE	-0.0555	-0.0529	-0.0470	-0.0434	-0.0422	-0.0381
	(-1.28)	(-1.25)	(-1.11)	(-1.04)	(-1.00)	(-0.92)
FAMILY_AGE	-0.0031	-0.0010	-0.0058	-0.0039	-0.0026	-0.0005
	(-0.14)	(-0.04)	(-0.27)	(-0.16)	(-0.12)	(-0.02)
FAMILY_EXPENSES	-0.6416***	-0.6174***	-0.6076***	-0.5819***	-0.6115***	-0.5841***
	(-4.18)	(-4.11)	(-4.07)	(-3.93)	(-4.00)	(-3.92)
FAMILY_TURNOVER	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	(0.78)	(0.87)	(0.83)	(0.93)	(0.85)	(0.94)
FAMILY_VOLATILITY	-0.0482**	-0.0473**	-0.0521***	-0.0507***	-0.0572***	-0.0570***
	(-2.30)	(-2.39)	(-2.49)	(-2.55)	(-2.74)	(-2.88)
FAMILY_PASTRETURN	0.0783***	0.0729***	0.0775***	0.0727***	0.0778***	0.0738***
	(5.73)	(6.01)	(5.70)	(5.97)	(5.70)	(5.93)
FAMILY_SHARECLASSES	0.0510	0.0344	0.0492	0.0326	0.0410	0.0237
	(1.05)	(0.76)	(1.01)	(0.72)	(0.84)	(0.53)
Fixed Effects			Time			
Observations	15,452	15,092	15,452	15,092	15,452	15,092
Adj. R^2	0.02	0.02	0.02	0.02	0.02	0.02

Panel F. Table 8, Panel A with bootstrapped standard errors

Specification			Performance with			
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			AVG_EXPECTED_RETURN_IMPROVEMENT			
FOREIGN_IO	-1.1398***	-0.4759***	-0.5251***	-0.9376***		
	(-63.55)	(-6.16)	(-9.53)	(-10.72)		
|INTERCEPT_8F|					5.0075***	
					(6.74)	
COMOVEMENT_8F						-0.0226***
						(-3.35)
FIRMS_SIZE		-0.1716***	-0.1338***	-0.1357***	-0.1299***	-0.1319***
		(-85.17)	(-73.78)	(-34.15)	(-38.95)	(-34.23)
BTM		-0.4054***	-0.1776***	-0.1504***	-0.3590***	-0.3536***
		(-13.33)	(-8.72)	(-3.82)	(-15.84)	(-13.92)
MOMENTUM		-0.0298**	-0.0544***	-0.0038	-0.0732***	-0.0579***
		(-2.38)	(-7.92)	(-0.28)	(-4.83)	(-3.62)
LEVERAGE		-0.4630***	0.4890***	-0.6215***	-1.1175***	-1.1556***
		(-9.40)	(10.00)	(-11.61)	(-25.58)	(-25.04)
ZEROFRACTION		-0.3597***	-0.0297	-0.9364***	-0.8693***	-0.8642***
		(-8.13)	(-0.86)	(-17.83)	(-15.16)	(-15.01)
Fixed Effects			Time			
Observations	3,001	3,001	3,001	3,001	3,001	3,001
Adjusted R^2	0.65	0.71	0.75	0.80	0.79	0.79

Panel G. Table 8, Panel B with bootstrapped standard errors

Specification			Performance with			
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			AVG_EXPECTED_RETURN_IMPROVEMENT			
FOREIGN_IO	-0.2936***	-0.3116***	-0.1324***	-0.3631***		
	(-19.55)	(-25.06)	(-11.60)	(-19.02)		
|INTERCEPT_8F|					4.5853***	
					(8.82)	
COMOVEMENT_8F						-0.0325***
						(-12.72)
FIRMS_SIZE		-0.0261***	-0.0007	-0.0182***	-0.0192***	-0.0197***
		(-18.49)	(-0.84)	(-9.23)	(-9.25)	(-9.01)
BTM		-0.1116***	-0.0244***	-0.1202***	-0.0975***	-0.0899***
		(-13.77)	(-3.81)	(-12.57)	(-7.90)	(-7.06)
MOMENTUM		-0.0266***	-0.0280***	-0.0498***	-0.0659***	-0.0679***
		(-3.13)	(-4.86)	(-4.62)	(-4.90)	(-5.10)
LEVERAGE		-0.3115***	-0.0123*	-0.1989***	-0.4287***	-0.4927***
		(-33.00)	(-1.65)	(-15.23)	(-19.22)	(-19.90)
ZEROFRACTION		0.2569***	0.0805***	0.2856***	-0.1056***	-0.0841***
		(17.64)	(5.65)	(15.61)	(-4.76)	(-3.59)
Fixed Effects			Time			
Observations	4,592	4,567	4,567	4,567	3,751	3,751
Adjusted R^2	0.65	0.71	0.85	0.69	0.73	0.74

Panel H. Table 9 with bootstrapped standard errors

Sample	Difference in Return Improvement Treatment	Difference in Return Improvement Control	Difference-in-difference Estimate All
Specification: 1F_Alpha	-0.0260***	-0.0105	-0.0155***
	(-3.71)	(-1.44)	(-4.38)
Specification: 4F_Alpha	-0.0303**	-0.0227**	-0.0076**
	(-2.27)	(-1.99)	(-2.40)
Specification: 8F_Alpha	-0.0289***	0.0024	-0.0313***
	(-3.50)	(0.25)	(-4.02)
Observations	10	10	10

TABLE IA.2

Endogenous Switching Regressions – Sub-sample Tests

Table IA.2 presents sub-sample tests on the endogenous switching regression presented in Table 3 of the main article, dropping selected investment styles from the sample. In Panel A, columns 1 to 3 drop domestic US Equity funds and columns 4 to 6 of the same panel drop European Equity funds. Columns 1 to 3 of Panel B drop Global Equity funds and columns 4 to 6 of that panel drop Emerging Markets & Asia Pacific funds. The measure of fund performance in all those tables is 8F_ALPHA. All other specifications are as in Table 3 of the main article. Standard errors allow for clustering at the family level. Panel C reports the total realized gains from outsourcing that correspond to these estimates. The panel follows the same structure as Table 4 of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively.

Panel A. Excluding US Domestic Equity Styles or Excluding European Equity

Sub-sample	Excluding Domestic US Equity			Excluding European Equity		
Equation	Selection	Performance		Selection	Performance	
Sample	All funds	Out-sourced	In-house	All funds	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	OUTSOURCED	8F_ALPHA		OUTSOURCED	8F_ALPHA	
Determinants of Outsourcing ($Z_{j,t}$)						
SOLD_TO_INTERNATIONAL	-0.0041***			-0.0052***		
	(-3.56)			(-3.24)		
SOLD_TO_US	0.0002			0.0000		
	(0.45)			(0.06)		
FAMILY_FUNDS_ AT_INC.	0.0307*			0.0372		
	(1.90)			(1.55)		
ENGLISH_LANGUAGE	0.1049***			0.1804***		
	(3.59)			(6.13)		
Determinants of Performance ($X_{j,t}$)						
MANAGER_STYLE_SIZE	0.0159***	0.0057	-0.0009	0.0192***	0.0190***	0.0025
	(5.09)	(0.82)	(-0.31)	(4.24)	(3.20)	(1.00)
COMMON_LANGUAGE	0.0435	0.4528***	-0.0169	-0.1444**	0.5303***	0.1519***
	(0.94)	(2.88)	(-0.39)	(-1.99)	(3.22)	(3.79)
KM_DISTANCE	0.0065	-0.0010	-0.0121**	-0.0157**	0.0111	0.0091
	(1.28)	(-0.07)	(-2.23)	(-2.15)	(0.71)	(1.60)
FAMILY_STYLE_ SPECIALIZATION	-0.0024***	-0.0001	0.0014***	-0.0025***	-0.0021***	0.0002
	(-4.60)	(-0.05)	(2.74)	(-5.20)	(-3.10)	(0.50)
FAMILY_SIZE	-0.0344***	0.0075	0.0235***	-0.0233***	-0.0040	0.0104**
	(-5.59)	(0.57)	(3.40)	(-3.11)	(-0.57)	(2.01)
FUND_DEPENDENCE	0.1969***	0.0802		0.2723***	0.1968***	
	(5.35)	(1.07)		(6.67)	(2.73)	
FAMILY_MANAGER_ SAME_LANGUAGE	-0.2032**	-0.0711		-0.1607**	-0.0389	
	(-2.42)	(-1.04)		(-2.45)	(-0.78)	
FUND_SIZE	-0.0031	-0.0576***	-0.0315***	-0.0059	-0.0314***	-0.0241***
	(-0.45)	(-4.21)	(-6.07)	(-0.86)	(-3.78)	(-4.96)
AGE	-0.0018*	0.0026	0.0010	-0.0039***	-0.0009	0.0015**
	(-1.90)	(1.63)	(1.22)	(-4.23)	(-0.71)	(2.27)
EXPENSES	0.0242**	-0.0412	-0.0092	0.0353*	0.0577**	0.0130
	(2.05)	(-0.98)	(-0.64)	(1.82)	(2.29)	(0.91)
TURNOVER	-0.0000	0.0000	0.0000	-0.0000	-0.0000	-0.0000
	(-1.31)	(0.89)	(0.06)	(-0.40)	(-0.54)	(-0.17)
VOLATILITY	-0.0003	0.0046	0.0001	-0.0005	0.0014	0.0008
	(-0.23)	(1.26)	(0.05)	(-0.36)	(0.48)	(0.43)
PASTRETURN	0.0002	-0.0104***	-0.0100***	-0.0002	-0.0118***	-0.0128***
	(0.54)	(-5.59)	(-11.46)	(-0.62)	(-10.17)	(-16.44)
SHARECLASSES	-0.0040	-0.0009	0.0048	-0.0017	-0.0049	-0.0013
	(-0.80)	(-0.16)	(1.09)	(-0.25)	(-1.30)	(-0.39)
Selectivity Variables ($\lambda_{j,t}$)						
INV_MILLS_RATIO		-0.1967**	0.1288**		-0.3298***	0.0669
		(-2.41)	(2.13)		(-3.95)	(1.17)

	(1)	(2)	(3)		(4)	(5)	(6)
Fixed Effects				Time & Style			
Observations	276,177	47,248	228,929		355,013	83,400	271,613
Adj. (Col1: Pseudo) R^2	0.14	0.05	0.04		0.09	0.05	0.04

Panel B. Excluding Global Equity or Excluding Emerging Markets & Asia Pacific Equity

Sub-sample	Excluding Global Equity				Excluding Emerging Markets & Asia Pac.		
Equation	Selection	Performance			Selection	Performance	
Sample	All funds	Out-sourced	In-house		All funds	Out-sourced	In-house
	(1)	(2)	(3)		(4)	(5)	(6)
Variables	OUTSOURCED	8F_ALPHA			OUTSOURCED	8F_ALPHA	
Determinants of Outsourcing ($Z_{j,t}$)							
SOLD_TO_INTERNATIONAL	-0.0048***				-0.0050***		
	(-3.98)				(-3.78)		
SOLD_TO_US	-0.0001				-0.0001		
	(-0.32)				(-0.15)		
FAMILY_FUNDS_ AT_INC.	0.0248				0.0258		
	(1.39)				(1.34)		
ENGLISH_LANGUAGE	0.1024***				0.0776*		
	(3.50)				(1.89)		
Determinants of Performance ($X_{j,t}$)							
MANAGER_STYLE_SIZE	0.0152***	0.0194***	0.0025		0.0147***	0.0211***	0.0044*
	(3.99)	(3.12)	(0.94)		(3.73)	(3.58)	(1.92)
COMMON_LANGUAGE	0.0247	0.5758***	0.0290		0.0823	0.4362***	0.0243
	(0.50)	(3.43)	(0.71)		(1.19)	(3.44)	(0.67)
KM_DISTANCE	-0.0010	0.0112	-0.0036		-0.0124**	-0.0139	-0.0040
	(-0.19)	(0.79)	(-0.72)		(-2.05)	(-1.13)	(-0.89)
FAMILY_STYLE_ SPECIALIZATION	-0.0015***	-0.0015**	0.0007**		-0.0019***	-0.0018***	0.0007**
	(-3.45)	(-2.31)	(1.97)		(-4.32)	(-2.70)	(2.25)
FAMILY_SIZE	-0.0147**	0.0036	0.0117**		-0.0160**	-0.0031	0.0095*
	(-2.35)	(0.56)	(2.40)		(-2.48)	(-0.48)	(1.95)
FUND_DEPENDENCE	0.2339***	0.1845**			0.2546***	0.2551***	
	(6.68)	(2.41)			(6.74)	(3.01)	
FAMILY_MANAGER_ SAME_LANGUAGE	-0.2171***	-0.0947			-0.1954**	-0.1140*	
	(-2.87)	(-1.42)			(-2.30)	(-1.74)	
FUND_SIZE	-0.0114*	-0.0454***	-0.0267***		-0.0081	-0.0348***	-0.0257***
	(-1.90)	(-4.36)	(-6.26)		(-1.31)	(-4.05)	(-6.36)
AGE	-0.0031***	0.0003	0.0013**		-0.0033***	-0.0014	0.0011*
	(-4.05)	(0.24)	(2.11)		(-4.05)	(-0.96)	(1.72)
EXPENSES	0.0223	0.0074	-0.0077		0.0283*	0.0422	0.0031
	(1.55)	(0.21)	(-0.55)		(1.81)	(1.34)	(0.25)
TURNOVER	-0.0000	0.0000	-0.0000		-0.0000	0.0000	0.0000**
	(-0.74)	(0.99)	(-1.64)		(-1.26)	(0.42)	(2.58)
VOLATILITY	-0.0008	0.0046	0.0010		-0.0003	0.0017	-0.0006
	(-0.79)	(1.40)	(0.52)		(-0.21)	(0.56)	(-0.33)
PASTRETURN	-0.0001	-0.0118***	-0.0100***		-0.0002	-0.0104***	-0.0085***
	(-0.20)	(-7.63)	(-13.76)		(-0.62)	(-6.76)	(-10.75)
SHARECLASSES	-0.0015	-0.0047	0.0050		-0.0019	-0.0047	0.0030
	(-0.25)	(-1.00)	(1.45)		(-0.31)	(-1.21)	(0.97)
Selectivity Variables ($\lambda_{j,t}$)							
INV_MILLS_RATIO		-0.2922***	0.0747			-0.4086***	0.0270
		(-3.05)	(1.22)			(-3.82)	(0.46)
Fixed Effects				Time & Style			
Observations	380,804	75,835	304,969		415,670	87,369	328,301
Adj. (Col1: Pseudo) R^2	0.11	0.04	0.03		0.10	0.03	0.03

Panel C. Total realized gains from outsourcing – sub-sample results

	(1)		(2)		(3)		(4)
	Total Realized Gain	=	Realized Performance	-	Counterfactual Performance		
					(Return	+	Selection)
Outsourced Funds							
Excluding Domestic US Equity Specification: 8F_ALPHA	0.2189***		0.0073		-0.0467		-0.1649
Excluding European Equity Specification: 8F_ALPHA	0.0953***		0.0146		-0.0014		-0.0793
Excluding Global Equity Specification: 8F_ALPHA	0.1298***		0.0588		0.0216		-0.0926
Excluding Emerging Markets & Asia Pacific Equity Specification: 8F_ALPHA	0.0343**		-0.0080		-0.0092		-0.0330
In-House Funds							
Excluding Domestic US Equity Specification: 8F_ALPHA	0.3504***		0.0051		-0.2927		-0.0525
Excluding European Equity Specification: 8F_ALPHA	0.5842***		0.0163		-0.4450		-0.1229
Excluding Global Equity Specification: 8F_ALPHA	0.5122***		0.0493		-0.3688		-0.0941
Excluding Emerging Markets & Asia Pacific Equity Specification: 8F_ALPHA	0.7329***		0.0007		-0.5941		-0.1381

TABLE IA.3

Endogenous Switching Regression – Robustness Tests

Table IA.3 presents robustness tests of the endogenous switching regressions presented in Table 3. All specifications are as in Table 3 of the main article except for the use of instruments in the first stage selection equation. In Panel A here, no additional instrument is included in the selection equation and the second stage performance equations are identified by the non-linear transformation of the residuals of the selection equation. In Panel B, the vector $Z_{j,t}$ only contains the instruments related to the distribution channel reach of the family, i.e., the variables SOLD_TO_US and SOLD_TO_INTERNATIONAL. In Panel C, the vector $Z_{j,t}$ only contains the instrument related for capacity constraints of the family, i.e., the variable FAMILY_FUNDS_AT_INCEPTION. In Panel D, the vector $Z_{j,t}$ only contains the instrument that captures if English is an official language in the country where the fund is managed, i.e., the variable ENGLISH_LANGUAGE. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from standard errors clustered at the family level.

Panel A. No first-stage instruments

Equation	Selection	Performance		Performance		Performance	
Sample	All funds	Out-sourced	In-house	Out-sourced	In-house	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	OUTSOURCED	1F_ALPHA		4F_ALPHA		8F_ALPHA	
Determinants of Performance ($X_{j,t}$)							
MANAGER_STYLE_SIZE	0.0163***	0.0134	-0.0020	0.0329	0.0014	0.0358	0.0026
	(4.52)	(0.51)	(-0.91)	(1.26)	(0.65)	(1.37)	(1.16)
COMMON_LANGUAGE	0.1763***	0.5035*	0.0511	0.5500*	-0.0709*	0.6680**	0.0275
	(3.49)	(1.74)	(1.33)	(1.80)	(-1.82)	(2.05)	(0.73)
KM_DISTANCE	0.0023	0.0192*	0.0034	0.0063	-0.0070*	0.0016	-0.0031
	(0.44)	(1.78)	(0.81)	(0.55)	(-1.65)	(0.12)	(-0.70)
FAMILY_STYLE_SPECIALIZATION	-0.002***	-0.0016	0.0011***	-0.0028	0.0014***	-0.0038	0.0006*
	(-4.70)	(-0.54)	(3.22)	(-0.92)	(4.09)	(-1.22)	(1.80)
FAMILY_SIZE	-0.018***	0.0017	0.0146***	-0.0184	0.0172***	-0.0248	0.0105**
	(-3.01)	(0.06)	(2.94)	(-0.63)	(3.95)	(-0.85)	(2.30)
FUND_DEPENDENCE	0.2317***	0.1960		0.3964		0.4411	
	(6.78)	(0.53)		(1.08)		(1.21)	
FAMILY_MANAGER_SAME_LANGUAGE	-0.189***	-0.0672		-0.2440		-0.2742	
	(-2.59)	(-0.28)		(-1.03)		(-1.12)	
FUND_SIZE	-0.0092	-0.0296*	-0.0150***	-0.046***	-0.024***	-0.047***	-0.025***
	(-1.49)	(-1.86)	(-3.48)	(-2.90)	(-5.85)	(-2.90)	(-6.50)
AGE	-0.004***	0.0006	0.0020***	-0.0034	0.0011**	-0.0047	0.0012**
	(-4.45)	(0.10)	(4.02)	(-0.58)	(2.14)	(-0.80)	(2.05)
EXPENSES	0.0269*	0.0530	0.0182	0.0360	-0.0025	0.0493	-0.0019
	(1.85)	(1.16)	(1.26)	(0.77)	(-0.19)	(1.01)	(-0.15)
TURNOVER	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.59)	(1.36)	(1.22)	(0.85)	(0.18)	(0.63)	(0.12)
VOLATILITY	-0.0004	-0.0105***	-0.0067***	-0.013***	-0.008***	0.0028	0.0011
	(-0.32)	(-3.22)	(-3.69)	(-4.42)	(-4.22)	(0.95)	(0.65)
PASTRETURN	-0.0001	0.0041***	0.0054***	-0.004***	-0.003***	-0.011***	-0.010***
	(-0.30)	(3.32)	(7.29)	(-3.12)	(-3.32)	(-8.00)	(-14.02)
SHARECLASSES	0.0003	-0.0105**	0.0025	-0.0020	0.0040	-0.0022	0.0026
	(0.06)	(-2.26)	(0.74)	(-0.54)	(1.33)	(-0.55)	(0.85)
Selectivity Variables ($\lambda_{j,t}$)							
INV_MILLS_RATIO		-0.3051	0.0649	-0.6528	0.0985*	-0.7267	0.0378
		(-0.54)	(0.98)	(-1.17)	(1.83)	(-1.30)	(0.67)
Fixed Effects				Time & Style			
Observations	454,956	93,657	361,299	93,657	361,299	93,657	361,299
Adj. (Col1: Pseudo) R^2	0.09	0.07	0.06	0.04	0.03	0.04	0.03

IA.11

Panel B. Distribution channel instruments only

Equation	Selection	Performance		Performance		Performance	
Sample	All funds	Out-sourced	In-house	Out-sourced	In-house	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	OUTSOURCED	1F_ALPHA		4F_ALPHA		8F_ALPHA	
Determinants of Outsourcing ($Z_{j,t}$)							
SOLD_TO_INTERNATIONAL	-0.005***						
	(-3.83)						
SOLD_TO_US	0.0001						
	(0.30)						
Determinants of Performance ($X_{j,t}$)							
MANAGER_STYLE_SIZE	0.0167***	0.0132*	-0.0016	0.0110*	0.0016	0.0205***	0.0027
	(4.54)	(1.77)	(-0.73)	(1.76)	(0.72)	(2.82)	(1.22)
COMMON_LANGUAGE	0.1686***	0.5021***	0.0623	0.3053**	-0.0681*	0.4990***	0.0305
	(3.14)	(3.25)	(1.60)	(2.11)	(-1.74)	(3.25)	(0.81)
KM_DISTANCE	0.0052	0.0212*	0.0030	0.0044	-0.0070	0.0021	-0.0031
	(1.00)	(1.92)	(0.71)	(0.38)	(-1.63)	(0.16)	(-0.72)
FAMILY_STYLE_	-0.002***	-0.0015*	0.0010***	-0.0002	0.0014***	-0.0019**	0.0006*
SPECIALIZATION	(-4.82)	(-1.75)	(2.97)	(-0.30)	(4.00)	(-2.33)	(1.70)
FAMILY_SIZE	-0.017***	0.0028	0.0129***	0.0059	0.0168***	-0.0072	0.0101**
	(-2.85)	(0.35)	(2.60)	(0.82)	(3.85)	(-0.90)	(2.20)
FUND_DEPENDENCE	0.2339***	0.1859**		0.0844		0.2179**	
	(6.80)	(2.01)		(1.09)		(2.34)	
FAMILY_MANAGER_	-0.199***	-0.0559		-0.0366		-0.1216*	
SAME_LANGUAGE	(-2.62)	(-0.74)		(-0.55)		(-1.72)	
FUND_SIZE	-0.0100	-0.0300***	-0.0149***	-0.034***	-0.024***	-0.039***	-0.025***
	(-1.63)	(-3.50)	(-3.45)	(-3.85)	(-5.84)	(-4.28)	(-6.49)
AGE	-0.003***	0.0009	0.0018***	0.0018	0.0010**	-0.0008	0.0011*
	(-4.17)	(0.56)	(3.50)	(1.30)	(2.02)	(-0.57)	(1.93)
EXPENSES	0.0288**	0.0481*	0.0198	-0.0027	-0.0024	0.0183	-0.0015
	(2.02)	(1.79)	(1.35)	(-0.10)	(-0.18)	(0.62)	(-0.12)
TURNOVER	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.48)	(1.37)	(1.19)	(0.96)	(0.17)	(0.72)	(0.11)
VOLATILITY	-0.0004	-0.0105***	-0.0067***	-0.013***	-0.008***	0.0031	0.0011
	(-0.34)	(-3.41)	(-3.69)	(-4.33)	(-4.22)	(1.06)	(0.65)
PASTRETURN	-0.0001	0.0041***	0.0054***	-0.004***	-0.003***	-0.011***	-0.010***
	(-0.34)	(3.33)	(7.29)	(-3.07)	(-3.32)	(-7.98)	(-14.02)
SHARECLASSES	-0.0007	-0.0103**	0.0025	-0.0026	0.0040	-0.0025	0.0026
	(-0.12)	(-2.32)	(0.74)	(-0.73)	(1.34)	(-0.64)	(0.86)
Selectivity Variables ($\lambda_{j,t}$)							
INV_MILLS_RATIO		-0.2873**	0.0214	-0.1695	0.0908	-0.379***	0.0270
		(-2.12)	(0.30)	(-1.62)	(1.64)	(-3.07)	(0.48)
Fixed Effects				Time & Style			
Observations	454,956	93,657	361,299	93,657	361,299	93,657	361,299
Adj. (Col1: Pseudo) R^2	0.10	0.07	0.06	0.04	0.03	0.04	0.03

Panel C. Capacity constraint instrument only

Equation	Selection	Performance		Performance		Performance	
Sample	All funds	Out-sourced	In-house	Out-sourced	In-house	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	OUTSOURCED	1F_ALPHA		4F_ALPHA		8F_ALPHA	
Determinants of Outsourcing ($Z_{j,t}$)							
FAMILY_FUNDS_ AT_INC.	0.0160						
	(0.92)						
Determinants of Performance ($X_{j,t}$)							
MANAGER_STYLE_SIZE	0.0159***	0.0137	-0.0015	0.0146	0.0019	0.0226	0.0030
	(4.42)	(0.82)	(-0.66)	(0.99)	(0.89)	(1.53)	(1.34)
COMMON_LANGUAGE	0.1831***	0.5081**	0.0608	0.3461*	-0.0621	0.5214**	0.0329
	(3.54)	(2.48)	(1.58)	(1.76)	(-1.62)	(2.36)	(0.88)
KM_DISTANCE	0.0019	0.0190*	0.0027	0.0036	-0.0076*	-0.0006	-0.0036
	(0.36)	(1.75)	(0.64)	(0.32)	(-1.80)	(-0.05)	(-0.84)
FAMILY_STYLE_ SPECIALIZATION	-0.002***	-0.0017	0.0010***	-0.0007	0.0013***	-0.0023	0.0005
	(-4.59)	(-0.91)	(2.94)	(-0.45)	(3.90)	(-1.34)	(1.63)
FAMILY_SIZE	-0.020***	0.0013	0.0126**	0.0013	0.0154***	-0.0107	0.0091**
	(-3.17)	(0.07)	(2.52)	(0.08)	(3.57)	(-0.63)	(2.00)
FUND_DEPENDENCE	0.2304***	0.2023		0.1412		0.2578	
	(6.72)	(0.88)		(0.69)		(1.27)	
FAMILY_MANAGER_ SAME_LANGUAGE	-0.1836**	-0.0737		-0.0779		-0.1575	
	(-2.56)	(-0.49)		(-0.56)		(-1.08)	
FUND_SIZE	-0.0079	-0.0298***	-0.0151***	-0.036***	-0.024***	-0.039***	-0.026***
	(-1.33)	(-2.84)	(-3.49)	(-3.60)	(-5.90)	(-3.66)	(-6.54)
AGE	-0.004***	0.0004	0.0018***	0.0007	0.0008*	-0.0018	0.0010*
	(-4.40)	(0.11)	(3.53)	(0.20)	(1.68)	(-0.53)	(1.75)
EXPENSES	0.0257*	0.0547	0.0205	0.0060	-0.0009	0.0292	-0.0007
	(1.77)	(1.52)	(1.40)	(0.16)	(-0.06)	(0.75)	(-0.06)
TURNOVER	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.54)	(1.37)	(1.18)	(0.94)	(0.13)	(0.69)	(0.07)
VOLATILITY	-0.0003	-0.0106***	-0.0067***	-0.013***	-0.008***	0.0030	0.0012
	(-0.31)	(-3.26)	(-3.68)	(-4.32)	(-4.20)	(1.01)	(0.69)
PASTRETURN	-0.0001	0.0041***	0.0054***	-0.004***	-0.003***	-0.011***	-0.010***
	(-0.25)	(3.35)	(7.25)	(-3.07)	(-3.37)	(-7.97)	(-14.07)
SHARECLASSES	0.0004	-0.0102**	0.0026	-0.0022	0.0041	-0.0022	0.0028
	(0.06)	(-2.20)	(0.76)	(-0.63)	(1.38)	(-0.55)	(0.90)
Selectivity Variables ($\lambda_{j,t}$)							
INV_MILLS_RATIO		-0.3171	0.0149	-0.2591	0.0498	-0.4469	0.0005
		(-0.91)	(0.22)	(-0.83)	(0.97)	(-1.41)	(0.01)
Fixed Effects				Time & Style			
Observations	453,757	93,547	360,210	93,547	360,210	93,547	360,210
Adj. (Col1: Pseudo) R^2	0.09	0.07	0.06	0.04	0.03	0.04	0.03

IA.13

Panel D. English language instrument only

Equation	Selection	Performance		Performance		Performance	
Sample	All funds	Out-sourced	In-house	Out-sourced	In-house	Out-sourced	In-house
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Variables	OUTSOURCED	1F_ALPHA		4F_ALPHA		8F_ALPHA	
Determinants of Outsourcing ($Z_{j,t}$)							
ENGLISH_LANGUAGE	0.1175***						
	(4.42)						
Determinants of Performance ($X_{j,t}$)							
MANAGER_STYLE_SIZE	0.0169***	0.0070	-0.0030	0.0065	0.0007	0.0140**	0.0016
	(4.69)	(0.90)	(-1.35)	(0.98)	(0.33)	(2.05)	(0.71)
COMMON_LANGUAGE	0.0198	0.4385***	0.0251	0.2575*	-0.0887**	0.4341***	0.0016
	(0.41)	(2.93)	(0.69)	(1.67)	(-2.30)	(2.84)	(0.04)
KM_DISTANCE	-0.0041	0.0197*	0.0047	0.0033	-0.0060	0.0006	-0.0018
	(-0.82)	(1.75)	(1.12)	(0.28)	(-1.42)	(0.05)	(-0.42)
FAMILY_STYLE_ SPECIALIZATION	-0.002***	-0.0009	0.0013***	0.0003	0.0015***	-0.0012	0.0008**
	(-4.68)	(-0.93)	(3.85)	(0.27)	(4.51)	(-1.31)	(2.43)
FAMILY_SIZE	-0.018***	0.0092	0.0187***	0.0106	0.0201***	-0.0003	0.0146***
	(-3.02)	(1.09)	(3.92)	(1.16)	(4.59)	(-0.04)	(3.15)
FUND_DEPENDENCE	0.2369***	0.1050		0.0249		0.1331	
	(6.94)	(1.08)		(0.28)		(1.45)	
FAMILY_MANAGER_ SAME_LANGUAGE	-0.198***	-0.0082		-0.0007		-0.0732	
	(-2.72)	(-0.13)		(-0.01)		(-1.08)	
FUND_SIZE	-0.0100*	-0.0264***	-0.0153***	-0.032***	-0.024***	-0.035***	-0.026***
	(-1.65)	(-3.13)	(-3.53)	(-3.85)	(-5.89)	(-4.11)	(-6.56)
AGE	-0.004***	0.0021	0.0025***	0.0026*	0.0014***	0.0003	0.0017***
	(-4.42)	(1.23)	(5.18)	(1.66)	(2.94)	(0.18)	(2.94)
EXPENSES	0.0288**	0.0426	0.0144	-0.0074	-0.0052	0.0135	-0.0057
	(1.98)	(1.51)	(1.04)	(-0.26)	(-0.40)	(0.43)	(-0.48)
TURNOVER	-0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(-0.51)	(1.37)	(1.31)	(0.97)	(0.23)	(0.72)	(0.21)
VOLATILITY	-0.0004	-0.0103***	-0.0067***	-0.013***	-0.007***	0.0033	0.0012
	(-0.36)	(-3.31)	(-3.69)	(-4.26)	(-4.22)	(1.15)	(0.66)
PASTRETURN	-0.0002	0.0041***	0.0055***	-0.004***	-0.003***	-0.011***	-0.010***
	(-0.57)	(3.36)	(7.30)	(-3.07)	(-3.31)	(-8.00)	(-14.02)
SHARECLASSES	-0.0012	-0.0111**	0.0024	-0.0030	0.0039	-0.0035	0.0026
	(-0.20)	(-2.47)	(0.72)	(-0.84)	(1.29)	(-0.89)	(0.83)
Selectivity Variables ($\lambda_{j,t}$)							
INV_MILLS_RATIO		-0.1635	0.1744***	-0.0783	0.1761***	-0.2492*	0.1457***
		(-1.15)	(3.08)	(-0.61)	(3.34)	(-1.89)	(2.59)
Fixed Effects				Time & Style			
Observations	454,956	93,657	361,299	93,657	361,299	93,657	361,299
Adj. (Col1: Pseudo) R^2	0.10	0.07	0.06	0.04	0.03	0.04	0.03

TABLE IA.4

Realized Gains from Outsourcing – Robustness Tests

Table IA.4 presents robustness tests of the monthly total realized gains in terms of performance from outsourcing, as in Table 4 of the main article. The estimates correspond to the robustness tests of the endogenous switching regressions in Table IA.3. All other specifications are as in Table 4 of the main article.

	(1)		(2)		(3)		(4)
	Total Realized Gain	=	Realized Performance	-	Counterfactual Performance		
					(Return	+	Selection)
Outsourced Funds							
No first-stage instruments							
Specification: 1F_ALPHA	0.0924***		0.2066		0.1948		-0.0806
Specification: 4F_ALPHA	0.1615***		0.0256		-0.0135		-0.1223
Specification: 8F_ALPHA	0.0567***		0.0144		0.0046		-0.0469
Distribution channel instruments only							
Specification: 1F_ALPHA	0.0196		0.2066		0.2134		-0.0265
Specification: 4F_ALPHA	0.1477***		0.0256		-0.1221		-0.1120
Specification: 8F_ALPHA	0.0386**		0.0144		0.0092		-0.0334
Capacity constraint instrument only							
Specification: 1F_ALPHA	0.0085		0.2066		0.2165		-0.0185
Specification: 4F_ALPHA	0.0798***		0.0256		0.0074		-0.0618
Specification: 8F_ALPHA	-0.0059		0.0144		0.0208		-0.0006
English language instrument only							
Specification: 1F_ALPHA	0.2739***		0.2066		0.1482		-0.2155
Specification: 4F_ALPHA	0.2895***		0.0256		-0.0464		-0.2175
Specification: 8F_ALPHA	0.2358***		0.0144		-0.0414		-0.1800
In-House Funds							
No first-stage instruments							
Specification: 1F_ALPHA	0.5713***		0.2208		-0.2486		-0.1019
Specification: 4F_ALPHA	1.1826***		0.0388		-0.9256		-0.2181
Specification: 8F_ALPHA	1.3266***		0.0191		-1.0647		-0.2428
Distribution channel instruments only							
Specification: 1F_ALPHA	0.5337***		0.2208		-0.2175		-0.0954
Specification: 4F_ALPHA	0.2949***		0.0388		-0.1998		-0.0563
Specification: 8F_ALPHA	0.6834***		0.0191		-0.5385		-0.1258
Capacity constraint instrument only							
Specification: 1F_ALPHA	0.5935***		0.2208		-0.2663		-0.1060
Specification: 4F_ALPHA	0.4623***		0.0388		-0.3366		-0.0866
Specification: 8F_ALPHA	0.8146***		0.0191		-0.6458		-0.1494
English language instrument only							
Specification: 1F_ALPHA	0.3108***		0.2208		-0.0357		-0.0544
Specification: 4F_ALPHA	0.1304***		0.0388		-0.0655		-0.0260
Specification: 8F_ALPHA	0.4505***		0.0191		-0.3486		-0.0829

TABLE IA.5

Choice of Outsourcing – Structural Form Estimates – Robustness Tests

Table IA.5 presents robustness tests of the choice of outsourcing in structural form as in Table 5 of the main article. Panel A presents descriptive statistics of the variable "Expected Return Improvement" as defined in Section IV.B of the main article. The panel includes summary statistics of this variable for the full sample, a test of the difference in mean of this variable for outsourced versus in-house funds and, in the last two columns, the simple R^2 statistic from a regression of these expected return improvements on either time or fund fixed effects to examine how much of their total variation is explained by either time or fund effects. Panels B and C present specifications that correspond to the robustness tests presented in Table IA.3, all other specifications are as in Table 5 of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from standard errors that allow for clustering at the family level.

Panel A. Summary statistics of variable "Expected Return Improvement"

Specification	Mean	STD	P5	P25	P50	P75	P95	Difference in Mean (Outs. – Inh.)	% Total Variance explained by time effects	% Total Variance explained by fund effects
1F_ALPHA	-0.308	0.242	-0.705	-0.451	-0.297	-0.156	0.053	0.058***	60%	29%
4F_ALPHA	-0.111	0.231	-0.484	-0.259	-0.110	0.032	0.267	0.022***	77%	20%
8F_ALPHA	-0.409	0.246	-0.817	-0.569	-0.402	-0.250	-0.016	0.073***	66%	32%

Panel B. Robustness tests of structural form estimates

Specification	No first-stage instruments			Distribution channel instruments only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	OUTSOURCED					
EXPECTED_RETURN_ IMPROVEMENT	0.2207***	0.2703***	0.2753***	0.1714***	0.0975***	0.1974***
	(9.80)	(11.38)	(11.53)	(7.48)	(5.22)	(8.10)
SOLD_TO_ INTERNATIONAL				-0.0061***	-0.006***	-0.006***
				(-4.30)	(-4.36)	(-4.27)
SOLD_TO_ US				0.0004	0.0005	0.0004
				(1.32)	(1.49)	(1.16)
Observations	454,956	454,956	454,956	454,956	454,956	454,956
Pseudo R^2	0.02	0.05	0.05	0.03	0.03	0.04

Panel C. Robustness tests of structural form estimates - continued

Specification	Capacity constraint instrument only			English language instrument only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(7)	(8)	(9)	(10)	(11)	(12)
Variables	OUTSOURCED					
EXPECTED_RETURN_ IMPROVEMENT	0.2164***	0.1626***	0.2479***	0.0914***	0.0292**	0.1202***
	(9.00)	(7.75)	(9.66)	(4.04)	(2.00)	(6.61)
ENGLISH_LANGUAGE	-0.0169	-0.0185	-0.0128			
	(-1.08)	(-1.19)	(-0.82)			
FAMILY_FUNDS_AT_INC.				0.1432***	0.1515***	0.1385***
				(5.52)	(5.92)	(5.31)
Observations	454,957	453,757	453,757	454,956	454,956	454,956
Pseudo R^2	0.02	0.01	0.03	0.04	0.03	0.04

Switching the Outsourcing Status – Structural Form Estimates – Robustness Tests

Table IA.6 presents robustness tests of the choice of switching a fund status from outsourced to in-house in structural form as in Table 6 of the main article. The specifications correspond to the robustness tests presented in Table IA.3, all other specifications are as in Table 6 of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from standard errors that allow for clustering at the family level.

Panel A. Robustness tests of structural form estimates

Specification	No first-stage instruments			Distribution channel instruments only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			SWITCH_TO_INHOUSE			
EXPECTED_RETURN_ IMPROVEMENT	-0.6521***	-0.398***	-0.386***	-0.6463***	-0.587***	-0.621***
	(-6.16)	(-6.37)	(-6.74)	(-5.87)	(-3.93)	(-6.17)
SOLD_TO_ INTERNATIONAL				0.0005	0.0002	0.0004
				(0.23)	(0.07)	(0.17)
SOLD_TO_ US				-0.0011***	-0.001***	-0.001***
				(-3.83)	(-4.34)	(-3.59)
Observations	978	978	978	978	978	978
Pseudo R^2	0.04	0.04	0.05	0.06	0.04	0.06

Panel B. Robustness tests of structural form estimates - continued

Specification	Capacity constraint instrument only			English language instrument only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(7)	(8)	(9)	(10)	(11)	(12)
Variables			SWITCH_TO_INHOUSE			
EXPECTED_RETURN_ IMPROVEMENT	-0.7174***	-0.709***	-0.669***	-0.4014***	-0.1753	-0.433***
	(-6.46)	(-5.16)	(-7.09)	(-2.84)	(-1.10)	(-3.17)
ENGLISH_LANGUAGE	-0.1003***	-0.096***	-0.105***			
	(-5.44)	(-5.10)	(-5.70)			
FAMILY_FUNDS_AT_INC.				-0.2390***	-0.301***	-0.226***
				(-4.55)	(-6.30)	(-4.31)
Observations	978	978	978	978	978	978
Pseudo R^2	0.07	0.06	0.08	0.06	0.05	0.06

TABLE IA.7

Expected Return Improvements and Flows – Robustness Tests

Table IA.7 presents robustness tests of the flow-performance sensitivity regressions presented in Table 7 of the main article. The test in Panel A and B (C and D) here correspond to Panel A (B) in the main article. The specifications correspond to the robustness tests presented in Table IA.3, all other specifications are as in Table 7 of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from standard errors that allow for clustering at the family level.

Panel A. Flows to Outsourced Funds

Specification	No first-stage instruments			Distribution channel instruments only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			FLOW			
LAG_EXP_RETURN_ IMPROVEMENT	0.7258*	0.2353	0.1804	0.7957*	1.0984*	0.4212
	(1.80)	(1.04)	(0.87)	(1.86)	(1.75)	(1.14)
LAG_ALPHA	0.2135***	0.2136***	0.2136***	0.2135***	0.2135***	0.2136***
	(12.92)	(12.91)	(12.91)	(12.92)	(12.92)	(12.91)
LAG_FLOW	0.0619***	0.0432***	0.0333**	0.0618***	0.0422***	0.0331**
	(5.23)	(3.51)	(2.52)	(5.23)	(3.42)	(2.50)
FUND_SIZE	-0.0105	-0.0130	-0.0151	-0.0103	-0.0071	-0.0141
	(-0.41)	(-0.50)	(-0.58)	(-0.40)	(-0.27)	(-0.55)
AGE	-0.0216***	-0.0216***	-0.0215***	-0.0220***	-0.0233***	-0.0217***
	(-4.76)	(-4.65)	(-4.57)	(-4.85)	(-5.11)	(-4.72)
EXPENSES	-0.3065***	-0.2821***	-0.2810***	-0.3039***	-0.2774***	-0.2819***
	(-3.60)	(-3.37)	(-3.36)	(-3.57)	(-3.30)	(-3.36)
TURNOVER	0.0002**	0.0002***	0.0002***	0.0002**	0.0002**	0.0002***
	(2.43)	(2.66)	(2.68)	(2.40)	(2.55)	(2.66)
VOLATILITY	-0.0363***	-0.0381***	-0.0401***	-0.0361***	-0.0345***	-0.0407***
	(-3.51)	(-3.62)	(-3.79)	(-3.49)	(-3.28)	(-3.81)
PASTRETURN	0.0474***	0.0485***	0.0489***	0.0474***	0.0494***	0.0492***
	(14.56)	(14.90)	(14.93)	(14.55)	(14.94)	(14.93)
SHARECLASSES	0.0510**	0.0442*	0.0437*	0.0515**	0.0480**	0.0444*
	(2.08)	(1.86)	(1.85)	(2.09)	(2.00)	(1.87)
Fixed Effects			Time & Style			
Observations	68,719	68,719	68,719	68,719	68,719	68,719
Adj. R^2	0.08	0.08	0.08	0.08	0.08	0.08

Panel B. Flows to Outsourced Funds - continued

Specification	Capacity constraint instrument only			English language instrument only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			FLOW			
LAG_EXP_RETURN_ IMPROVEMENT	0.7198*	0.7779	0.3449	1.1138**	1.4327*	0.6098
	(1.80)	(1.59)	(1.07)	(2.10)	(1.89)	(1.30)
LAG_ALPHA	0.2134***	0.2134***	0.2135***	0.2134***	0.2135***	0.2136***
	(12.91)	(12.91)	(12.90)	(12.93)	(12.93)	(12.91)
LAG_FLOW	0.0620***	0.0427***	0.0333**	0.0613***	0.0418***	0.0329**
	(5.24)	(3.46)	(2.51)	(5.19)	(3.38)	(2.48)
FUND_SIZE	-0.0116	-0.0099	-0.0154	-0.0081	-0.0051	-0.0132
	(-0.45)	(-0.38)	(-0.59)	(-0.31)	(-0.20)	(-0.51)
AGE	-0.0217***	-0.0224***	-0.0215***	-0.0220***	-0.0241***	-0.0217***
	(-4.77)	(-4.96)	(-4.65)	(-4.88)	(-5.18)	(-4.73)
EXPENSES	-0.3060***	-0.2831***	-0.2838***	-0.3145***	-0.2738***	-0.2861***
	(-3.59)	(-3.37)	(-3.39)	(-3.66)	(-3.25)	(-3.41)
TURNOVER	0.0002**	0.0002***	0.0002***	0.0002**	0.0002**	0.0002***
	(2.43)	(2.59)	(2.67)	(2.31)	(2.52)	(2.65)
VOLATILITY	-0.0363***	-0.0356***	-0.0404***	-0.0352***	-0.0333***	-0.0412***
	(-3.50)	(-3.39)	(-3.80)	(-3.42)	(-3.15)	(-3.84)
PASTRETURN	0.0473***	0.0491***	0.0491***	0.0478***	0.0498***	0.0493***
	(14.55)	(14.92)	(14.93)	(14.66)	(15.04)	(14.98)
SHARECLASSES	0.0507**	0.0466*	0.0442*	0.0551**	0.0496**	0.0454*
	(2.07)	(1.95)	(1.87)	(2.20)	(2.05)	(1.91)
Fixed Effects			Time & Style			
Observations	68,693	68,693	68,693	68,719	68,719	68,719
Adj. R^2	0.08	0.08	0.08	0.08	0.08	0.08

Panel C. Family-level Flows

Specification	No first-stage instruments			Distribution channel instruments only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			FAMILYFLOW			
LAG_AVG_RETURN_ IMPROVEMENT	1.2825**	0.7425**	0.5947*	1.3922**	1.6534**	0.9894*
	(2.53)	(2.28)	(1.92)	(2.56)	(2.37)	(1.92)
LAG_FAMILY_ALPHA	0.0571*	0.0667	0.0502	0.0570*	0.0651	0.0498
	(1.69)	(1.65)	(1.36)	(1.69)	(1.60)	(1.34)
LAG_ FAMILYFLOW	0.0366*	0.0367*	0.0368*	0.0366*	0.0366*	0.0368*
	(1.71)	(1.72)	(1.72)	(1.71)	(1.71)	(1.72)
FAMILY_SIZE	-0.0450	-0.0286	-0.0308	-0.0480	-0.0392	-0.0355
	(-1.13)	(-0.73)	(-0.79)	(-1.20)	(-0.99)	(-0.90)
FAMILY_AGE	0.0002	0.0013	0.0015	-0.0003	-0.0029	0.0000
	(0.01)	(0.06)	(0.07)	(-0.01)	(-0.13)	(0.00)
FAMILY_EXPENSES	-0.6132***	-0.5904***	-0.5840***	-0.6125***	-0.5849***	-0.5812***
	(-4.18)	(-4.08)	(-4.02)	(-4.18)	(-4.06)	(-4.00)
FAMILY_TURNOVER	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	(1.37)	(1.43)	(1.42)	(1.36)	(1.41)	(1.42)
FAMILY_VOLATILITY	-0.0471**	-0.0480**	-0.0534***	-0.0473**	-0.0499***	-0.0564***
	(-2.47)	(-2.55)	(-2.85)	(-2.48)	(-2.64)	(-3.00)
FAMILY_PASTRETURN	0.0728***	0.0727***	0.0737***	0.0728***	0.0727***	0.0738***
	(6.05)	(6.01)	(5.99)	(6.06)	(6.03)	(6.00)
FAMILY_SHARECLASSES	0.0298	0.0210	0.0194	0.0315	0.0306	0.0224
	(0.68)	(0.48)	(0.44)	(0.71)	(0.70)	(0.51)
Fixed Effects			Time & Style			
Observations	15,092	15,092	15,092	15,092	15,092	15,092
Adj. R^2	0.02	0.02	0.02	0.02	0.02	0.02

Panel D. Family-level Flows - continued

Specification	Capacity constraint instrument only			English language instruments only		
Performance measure	1F_ALPHA	4F_ALPHA	8F_ALPHA	1F_ALPHA	4F_ALPHA	8F_ALPHA
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	FAMILYFLOW					
LAG_AVG_RETURN_ IMPROVEMENT	1.3127**	1.5323**	0.8982**	1.4819**	1.5320**	1.0411*
	(2.58)	(2.56)	(1.98)	(2.49)	(2.00)	(1.80)
LAG_FAMILY_ALPHA	0.0571*	0.0654	0.0499	0.0570*	0.0652	0.0497
	(1.69)	(1.61)	(1.35)	(1.68)	(1.60)	(1.34)
LAG_ FAMILYFLOW	0.0366*	0.0366*	0.0368*	0.0366*	0.0367*	0.0368*
	(1.71)	(1.71)	(1.72)	(1.71)	(1.71)	(1.72)
FAMILY_SIZE	-0.0467	-0.0368	-0.0349	-0.0484	-0.0404	-0.0367
	(-1.17)	(-0.93)	(-0.89)	(-1.20)	(-1.01)	(-0.92)
FAMILY_AGE	0.0002	-0.0016	0.0005	-0.0011	-0.0037	-0.0007
	(0.01)	(-0.07)	(0.03)	(-0.05)	(-0.17)	(-0.03)
FAMILY_EXPENSES	-0.6154***	-0.5937***	-0.5862***	-0.6121***	-0.5772***	-0.5799***
	(-4.19)	(-4.11)	(-4.02)	(-4.18)	(-4.01)	(-3.98)
FAMILY_TURNOVER	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	(1.37)	(1.41)	(1.42)	(1.35)	(1.41)	(1.42)
FAMILY_VOLATILITY	-0.0469**	-0.0484**	-0.0553***	-0.0475**	-0.0511***	-0.0572***
	(-2.46)	(-2.57)	(-2.95)	(-2.48)	(-2.71)	(-3.04)
FAMILY_PASTRETURN	0.0728***	0.0726***	0.0737***	0.0730***	0.0728***	0.0738***
	(6.05)	(6.02)	(5.99)	(6.08)	(6.04)	(6.01)
FAMILY_SHARECLASSES	0.0301	0.0281	0.0215	0.0329	0.0311	0.0237
	(0.69)	(0.64)	(0.49)	(0.74)	(0.70)	(0.54)
Fixed Effects	Time & Style					
Observations	15,092	15,092	15,092	15,092	15,092	15,092
Adj. R^2	0.02	0.02	0.02	0.02	0.02	0.02

TABLE IA.8

Return Improvements from Outsourcing and Market Segmentation – Robustness Tests

Table IA.8 presents robustness tests on monthly panel regressions that relate the return improvements from outsourcing to segmentation in the asset markets where the funds invest, as in Table 8 of the main article. The regressions are estimated on the investment country-month level and the specifications correspond to the robustness tests presented in Table IA.3, all other specifications are as in Table 8, Panel B of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from standard errors that allow for clustering at the time level.

Panel A. No first-state instruments

Specification	Performance with					
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	AVG_EXPECTED_RETURN_IMPROVEMENT					
FOREIGN_IO	-0.2866***	-0.3143***	-0.4095***	-0.5503***		
	(-16.51)	(-21.29)	(-13.62)	(-15.26)		
|INTERCEPT_8F|					7.5268***	
					(6.03)	
COMOVEMENT_8F						-0.0662***
						(-10.74)
FIRMS_SIZE		-0.0394***	-0.0664***	-0.0701***	-0.0904***	-0.0896***
		(-23.33)	(-18.68)	(-16.34)	(-17.36)	(-17.68)
BTM		-0.1585***	-0.2836***	-0.3258***	-0.2446***	-0.2372***
		(-17.52)	(-19.71)	(-18.12)	(-8.10)	(-7.66)
MOMENTUM		-0.0330***	-0.0648***	-0.0795***	-0.1650***	-0.1729***
		(-3.46)	(-3.83)	(-4.15)	(-6.79)	(-7.44)
LEVERAGE		-0.2772***	-0.1026***	-0.2165***	-0.4976***	-0.6255***
		(-21.69)	(-3.61)	(-6.65)	(-9.84)	(-12.07)
ZEROFRACTION		0.3243***	0.5957***	0.6851***	-0.3157***	-0.2850***
		(16.59)	(14.08)	(15.16)	(-5.55)	(-4.50)
Fixed Effects	Time					
Observations	4,592	4,567	4,567	4,567	3,751	3,751
Adjusted R^2	0.55	0.62	0.36	0.34	0.37	0.39

Panel B. Distribution channel instruments only

Specification	Performance with					
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	AVG_EXPECTED_RETURN_IMPROVEMENT					
FOREIGN_IO	-0.2957***	-0.3211***	-0.1451***	-0.3696***		
	(-17.13)	(-22.34)	(-11.89)	(-16.89)		
|INTERCEPT_8F|					4.7847***	
					(7.51)	
COMOVEMENT_8F						-0.0357***
						(-11.15)
FIRMS_SIZE		-0.0368***	-0.0101***	-0.0299***	-0.0371***	-0.0374***
		(-22.97)	(-9.81)	(-12.71)	(-14.49)	(-14.32)
BTM		-0.1491***	-0.0544***	-0.1619***	-0.1140***	-0.1068***
		(-17.30)	(-8.39)	(-16.06)	(-7.63)	(-6.85)
MOMENTUM		-0.0316***	-0.0315***	-0.0558***	-0.0863***	-0.0890***
		(-3.33)	(-4.69)	(-4.72)	(-5.83)	(-6.08)
LEVERAGE		-0.2919***	-0.0128	-0.1667***	-0.3767***	-0.4466***
		(-24.34)	(-1.61)	(-10.20)	(-14.29)	(-15.76)
ZEROFRACTION		0.3104***	0.1258***	0.3436***	-0.1719***	-0.1501***
		(16.71)	(7.80)	(14.43)	(-6.04)	(-4.77)
Fixed Effects	Time					
Observations	4,592	4,567	4,567	4,567	3,751	3,751
Adjusted R^2	0.57	0.65	0.81	0.60	0.66	0.66

Panel C. Capacity constraint instrument only

Specification		Performance with				
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			AVG_EXPECTED_RETURN_IMPROVEMENT			
FOREIGN_IO	-0.3046***	-0.3353***	-0.2040***	-0.4039***		
	(-16.47)	(-21.26)	(-13.30)	(-16.02)		
|INTERCEPT_8F|					5.2865***	
					(6.94)	
COMOVEMENT_8F						-0.0415***
						(-10.83)
FIRMS_SIZE		-0.0389***	-0.0183***	-0.0360***	-0.0467***	-0.0467***
		(-21.87)	(-12.20)	(-12.85)	(-14.94)	(-14.96)
BTM		-0.1641***	-0.0969***	-0.1944***	-0.1333***	-0.1261***
		(-17.99)	(-13.52)	(-16.94)	(-7.38)	(-6.74)
MOMENTUM		-0.0354***	-0.0392***	-0.0621***	-0.1037***	-0.1074***
		(-3.47)	(-4.51)	(-4.62)	(-6.21)	(-6.59)
LEVERAGE		-0.2768***	-0.0180	-0.1536***	-0.3775***	-0.4585***
		(-20.51)	(-1.63)	(-7.73)	(-12.06)	(-13.87)
ZEROFRACTION		0.3458***	0.2245***	0.4198***	-0.2074***	-0.1840***
		(16.98)	(11.25)	(14.81)	(-6.05)	(-4.83)
Fixed Effects			Time			
Observations	4,592	4,567	4,567	4,567	3,751	3,751
Adjusted R^2	0.53	0.61	0.71	0.52	0.58	0.58

Panel D. English language instrument only

Specification		Performance with				
	1F_ALPHA		4F_ALPHA		8F_ALPHA	
	(1)	(2)	(3)	(4)	(5)	(6)
Variables			AVG_EXPECTED_RETURN_IMPROVEMENT			
FOREIGN_IO	-0.2267***	-0.2372***	-0.0832***	-0.2966***		
	(-19.54)	(-23.32)	(-8.12)	(-18.31)		
|INTERCEPT_8F|					4.0042***	
					(9.06)	
COMOVEMENT_8F						-0.0274***
						(-12.72)
FIRMS_SIZE		-0.0239***	-0.0005	-0.0148***	-0.0147***	-0.0153***
		(-21.35)	(-0.64)	(-8.64)	(-7.91)	(-7.80)
BTM		-0.0921***	-0.0126**	-0.0972***	-0.0966***	-0.0896***
		(-12.45)	(-2.01)	(-10.99)	(-9.68)	(-8.68)
MOMENTUM		-0.0229***	-0.0252***	-0.0453***	-0.0609***	-0.0623***
		(-3.45)	(-4.86)	(-5.14)	(-5.33)	(-5.47)
LEVERAGE		-0.2735***	0.0061	-0.1626***	-0.3395***	-0.3938***
		(-32.18)	(0.84)	(-14.94)	(-17.57)	(-18.44)
ZEROFRACTION		0.1772***	0.0288**	0.2180***	-0.0743***	-0.0551***
		(12.82)	(2.03)	(13.32)	(-4.03)	(-2.83)
Fixed Effects			Time			
Observations	4,592	4,567	4,567	4,567	3,751	3,751
Adjusted R^2	0.72	0.77	0.86	0.75	0.79	0.79

Return Improvements from Outsourcing when the Information Environment Changes – Robustness Tests

Table IA.9 presents robustness tests of the difference-in-difference estimates of the return improvements from outsourcing that are realized in countries that undergo an IFRS enforcement reform during the sample period relative to return improvements in countries that do not implement an IFRS enforcement reform as in Table 9 of the main article. The specifications correspond to the robustness tests presented in Table IA.3, all other specifications are as in Table 9 of the main article. * / ** / *** indicate statistical significance at the 10% / 5% / 1% levels respectively computed from robust standard errors.

	Difference in Return Improvement	Difference in Return Improvement	Difference-in-difference Estimate
Sample	Treatment	Control	All
No first-stage instruments			
Specification: 1F_ALPHA	-0.0262***	-0.0038	-0.0224***
	(-3.25)	(-0.36)	(-4.24)
Specification: 4F_ ALPHA	-0.0307*	0.0180	-0.0487***
	(-1.92)	(0.78)	(-3.46)
Specification: 8F_ ALPHA	-0.0291**	0.0350	-0.0641***
	(-2.88)	(1.62)	(-3.32)
Distribution channel instruments only			
Specification: 1F_ALPHA	-0.0256***	-0.0048	-0.0208***
	(-3.29)	(-0.49)	(-4.22)
Specification: 4F_ ALPHA	-0.0299*	-0.0181	-0.0117***
	(-2.14)	(-1.45)	(-3.52)
Specification: 8F_ ALPHA	-0.0281***	0.0089	-0.0370***
	(-3.31)	(0.73)	(-3.66)
Capacity constraint instrument only			
Specification: 1F_ALPHA	-0.0264***	-0.0025	-0.0239***
	(-3.41)	(-0.23)	(-4.11)
Specification: 4F_ ALPHA	-0.0305*	-0.0110	-0.0195***
	(-2.16)	(-0.78)	(-4.11)
Specification: 8F_ ALPHA	-0.0293***	0.0143	-0.0436***
	(-3.31)	(1.01)	(-3.54)
English language instrument only			
Specification: 1F_ALPHA	-0.0266***	-0.0158**	-0.0108***
	(-3.47)	(-2.50)	(-3.64)
Specification: 4F_ ALPHA	-0.0304*	-0.0259**	-0.0045
	(-2.20)	(-2.30)	(-1.14)
Specification: 8F_ ALPHA	-0.0290***	-0.0021	-0.0269***
	(-3.48)	(-0.23)	(-4.03)
Observations	10	10	10